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08/113,329 08/30/93 HARVEY

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THOMAS J. SCOTT, JR.  
HOWREY & SIMON  
1299 PENNSYLVANIA AVE., N.W.  
WASHINGTON, DC 20006

I 56349 EXAMINER
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ART UNIT	PAPER NUMBER
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2619  
DATE MAILED:

05/23/96

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.             | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 2, 3, 5, 7-11, 13, 16-20, 22, 23, 31-40, 42, 44, 49-84 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2. ☐ Claims \_\_\_\_\_ have been cancelled.

3. ☐ Claims \_\_\_\_\_ are allowed.

4. ☒ Claims 2, 3, 5, 7-11, 13, 16-20, 22, 23, 31-40, 42, 44, 49-84 are rejected.

5. ☐ Claims \_\_\_\_\_ are objected to.

6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

1. Since there was a restriction requirement made in 5,233,654, the double patenting rejections made in the Final rejection mailed March 27, 1996 have to be modified. Accordingly, that action has been withdrawn. The period for response is restarted to begin with the mailing of this action. No double patenting rejections will be made based on parent patents 5,233,654 and 5,335,277.

2. The double patenting rejections in this action are based on the premise that all of the present claims were fully disclosed in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414.

3. The PTO's copies of the parent files are in poor form since they have been copied many time by members of the public. The files also are missing some of the papers. The double patenting rejections below presumes that there were no requirements for restriction made in any of the parent files.

4. There are three types of double patenting rejections:

- a) Statutory double patenting rejection under 35 USC 101,
- b) Nonstatutory obvious type double patenting,
- c) Nonstatutory non-obviousness type double patenting.

The rejections that follow will be the third type. There are two different rejections. The first rejects the claims because they have not been established to be independent and distinct from the patented claims. The second rejection includes that premise, and further supports the rejection by establishing that

representative claims from this application have common subject matter with representative ones of the patented claims.

5. Claims 2,3,5,7-11,13,16-20,22,23,31-40,42,44,and 49-84 (all of the claims in this application) are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414 since the claims, if allowed, would improperly extend the "right to exclude" already granted in those patents.

The subject matter claimed in the instant application is fully disclosed in the patents and is covered by the patents since the patents and the application are claiming common subject matter, as follows: a signal processing apparatus and method including an interactive communications system apparatus and method. Furthermore, there is no apparent reason why applicants were prevented from presenting claims corresponding to those of the instant application during prosecution of the parent applications which matured into patents. *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

A review of the claims in each of the four parent patents (5,109,414; 4,964,825; 4,704,725; 4,694,490) was made. These patented claims do not appear "independent and distinct" from the claims in this application. The present claims are directed to a method and apparatus for controlling communications including television communications or programming. The claims in patent

5,109,414 were directed to a processing system and method for signal distribution including television. The claims in patent 4,965,825 were directed to a system and process for signal processing including carrier communications. The claims in patent 4,704,725 were directed to a method of communicating data to receiver stations. The claims in patent 4,694,490 were directed to a method for communicating and processing television programs.

Applicants' invention can be envisioned at in three parts. As with most cable TV systems, there is a head end station which generates the video programming. Applicants have included an intermediate station which receives transmissions, from the head end or subscriber stations, and distributes the programming to each subscriber. The subscriber station receives the programming, and can communicate to the intermediate station with requests or instructions. Even if the claims directed to each station were "independent and distinct" from the claims directed to the other stations, there would be no reason to "restrict" between the three stations since their overall function is so interrelated that the stations have the same search area, i.e the PTO could not establish a burden if required to search for all three stations.

It is believed that CCPA in *Schneller* used the "independent and distinct" standard as the main factor in its determination that the double patenting rejection should be affirmed. The CCPA

stated that the fundamental reason supporting the principle of non-statutory double patenting rejections is to prevent unjustified timewise extension of the right to exclude granted by a patent no matter how the extension is brought about. Further the CCPA stated at 158 USPQ 210 (214):

"... To conform to this reason and to prevail here, appellant has the burden of establishing that the invention in his patent is "independent and distinct" from the invention of the appealed claims. The public policy considerations underlying 35 U.S.C. 121 permit separate patents on "independent and distinct" inventions which are initially "claimed in one application." The statute places initial responsibility for this determination on the Commissioner of Patents. Where, as here, no such determination has been made, it is necessary to scrutinize carefully an applicant's voluntary alleged determination of this issue for it can lead to the improper proliferation of patents on the same invention with the inherent result of extending timewise a patentee's right to exclude others from the invention disclosed in the original application and on which his patent has issued."

The CCPA further stated at page 215 the length of time between an earlier patent and a later filed application should be considered. Applicants' present application was filed August 30, 1993, which was almost six years after the first patent issued (serial number 06/317,510, filed November 3, 1981, patented as 4,694,490 on September 15, 1987) and almost three years after the first CIP issued as a patent (serial number 07/096,096, filed September 11, 1987, patented as 4,965,825 on October 23, 1990).

To the extent that one would view *Schneller* and *In re Kaplan*, 789 F.2d 1574, 229 USPQ 678 (Fed. Cir. 1986) to be in conflict, it is clear that *Schneller* is the controlling precedent to the factual situation here. In *Schneller*, the Court

specifically distinguished a situation of the same applicant from one where the application and patent had different inventive entities. In *Kaplan*, the inventive entities between the patent and application were different, as was required at the time of the Kaplan invention, since Kaplan's filing date was before the Patent Law Amendments Act of 1984. In this present case, as with *Schneller*, the inventive entities of the application and patent are the same. Clearly, Kaplan was required, or entitled, to file separate applications, whereas applicants and Schneller did not have reason to do so. Finally, decisions of a three-judge panel of the Federal Circuit cannot overturn prior precedential decisions of the CCPA. See *UMC Elec. Co. v. United States* 2 USPQ2d 1465.

6. Claims 2,3,5,7-11,13,16-20,22,23,31-40,42,44,and 49-84 (all of the claims in this application) are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; 5,109,414 since the claims, if allowed, would improperly extend the "right to exclude" already granted in those patents.

This rejection incorporates paragraph 4 above. That double patenting rejection is further supported by *Schneller* because the great majority of the patented claims are "comprising" type

claims.<sup>1</sup> While it is recognized that the specific claim limitations in the application may not have been claimed in the patents, that alone does not establish grounds for overcoming this rejection. The patent claims were directed to parts of applicants' total disclosed system or process. Therefore the recitation of "comprising" enables those patented claims to "cover" claim features now recited by applicants' present application claims.

Since the head end, intermediate, and subscriber stations are part of the overall system, claims to one part "cover" the other part(s) under the *Schneller* decision (page 215), since the preferred embodiment would include all three parts of the main system, i.e. head, intermediate, and subscriber stations. For example, claims to the subscriber station still cover the intermediate station because the subscriber station would be processing information that had to come from the intermediate station. A second example would be that claims to one aspect or function of the intermediate station would cover the invention of another aspect or function of the intermediate station since both functions could be performed with the other. Applicants' disclosed system includes similar features in the head, intermediate, and subscriber stations. For example, the stations

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<sup>1</sup>The claims that recite neither "comprising" nor "consisting" are considered to recite open claim language, i.e. equivalent to "comprising". See, for example, claim 1 of Patent 5,109,414.

can transmit and receive, and have computer, processor and controller capabilities. For that reason, the disclosure will permit broadly drafted claims to read on either the head, intermediate, or subscriber station. Patent claims that recite receiving and transmitting can cover both intermediate and subscriber stations. The fact that patent claims and application claims are directed to different elements does not prohibit this rejection if there is common or interrelated subject matter recited. The Court in *Schneller* stated at page 215:

"... They "cover" the preferred form ABCXY, common to the patent and this application, in the same sense. The fact that X and Y are distinct elements, performing, independent functions, so that either can be employed without the other, does not change this fact. Neither does appellant's omission of reference to the lip Y from his patent claims."

A review of representative ones of the patented claims will demonstrate that the patented claims cover the invention claimed in this application.

In patent 4,694,490, claim 9 is representative, and, as summarized below, recites processor means comprising:

- a) receiving means,
- b) video demodulator means, to detect a video signal,
- c) coupling the video to the receiver,
- d) determining presence or absence of embedded instruct to overlay signal when overlay is not displayed,
- e) computer means,
- f) overlay signals display user info,
- g) means to couple the overlay signals to the receiver,
- h) each overlay signal is specific to a user.

While claim 9 is an apparatus claim, there are method claims reciting similar limitations.

Application claim 20 is representative of a claim to the intermediate station in the overall system. The claim is directed to apparatus for sending the programming to subscribers. While the limitations of patent claim 9 above do not read on application claim 20, in sense of being the a 35 USC 101 same invention double patenting situation, both claims are directed to overlapping and interrelated areas in the same television distribution system. Patent claims, such as 9, directed to a computer controlled overlay system cover an intermediate station that generates or transmits the embedded signal that controls the computer so that it can generate the overlay signal. Applicants' total disclosure includes the systems of claim 9 and 20, and, therefore, claim 9 "covers" claim 20.

In patent 4,704,725, claim 3 is representative, and, as summarized below, recites a method of communicating data comprising:

- a) multiple receivers, each with a computer,
- b) transmitting instruct to transmit signals to the computers,
- c) detecting the signals and coupling them to the selected computers,
- d) having the computers control their own selected output device.

Application claim 5 is a representative method claim directed to the intermediate station. In this claim, the TV programming is received and sent to a computer for storage and processing depending on schedule information. While the limitations of patent claim 3 above do not read on application

claim 5, in sense of being the a 35 USC 101 same invention double patenting situation, both claims are directed to overlapping and interrelated areas in the same television distribution system. Patent claim 3 appears to be broad enough to include features of the intermediate station, and as such would cover the intermediate station limitations of application claim 5. Applicants' total disclosure includes the methods of claim 3 and 5, and, therefore, claim 3 "covers" claim 5.

In patent 4,965,825, claim 24 is representative, and, as summarized below, recites generating a computer output having the steps of:

- a) having multiple receivers, each with a computer,
- b) transmitting an instruct to generate signal to the computers,
- c) causing the computers to generate individual user output information.

Application claim 5 is a representative method claim directed to the intermediate station. In this claim, the TV programming is received and sent to a computer for storage and processing depending on schedule information. While the limitations of patent claim 24 above do not read on application claim 5, in sense of being the a 35 USC 101 same invention double patenting situation, both claims are directed to overlapping and interrelated areas in the same television distribution system. Claim 24, like claim 3 in 4,704,725, recites broad computer control limitations. This would cover applicants' intermediate station, as represented by claim 5, either because claim 24 is

broad enough to read on the intermediate station or because claim 24, even if directed to the subscriber station, would be processing the information generated or transmitted by the intermediate station. Applicants' total disclosure includes the methods of claims 24 and 5, and, therefore, claim 24 "covers" claim 5.

In patent 5,109,414, claim 15 is representative, and, as summarized below, recites a signal processing system (including):

- a) receiver/distribution means,
- b) switch means,
- c) control signal detector means for transferring data to storage means,
- d) storage means for storing and transferring data to processor means,
- e) processor means for controlling.

Application claim 20 is a representative apparatus claim directed to the intermediate station. In this claim, the TV programming is received and sent to a computer for storage and processing depending on schedule information. While the limitations of patent claim 15 above do not read on application claim 20, in sense of being the a 35 USC 101 same invention double patenting situation, both claims are directed to overlapping and interrelated areas in the same television distribution system. Patent claim 15 appears to be broad enough to include features of the intermediate station, and as such would cover the intermediate station limitations of application claim 20. Applicants' total disclosure includes the methods of claim 15 and 20, and, therefore, claim 15 "covers" claim 20.

In the arguments above, the examiner, when discussing several of the patents, stated that the patented claims were broad enough to read on multiple stations. While it is believed this analysis is correct, it is not critical to this rejection. Since the patented claims recite limitations that are interrelated with other similar features claimed in this application, it is the examiner's position that those patented claims "cover" the application claims because all of these claimed features (both in the patent and application) describe what is effectively the preferred embodiment.

The claims in this application, if allowed without a terminal disclaimer, would continue patent protection of the preferred embodiment, i.e. the complete system of the head, intermediate, and subscriber stations, beyond the expiration of applicants' parent patents.

7. Applicants' response filed on November 16, 1995 addresses *Schneller* under the test for obviousness-type double patenting. However, *Schneller* has been applied as establishing the test for non-obviousness-type double patenting. It is not persuasive for applicants to show that the application claims are patentably distinct from the patented claims. The non-obviousness non-statutory double patenting test does not allege that the claims are not patentably distinct. Applicants must establish that the application claims are "independent and distinct" from the patent

claims, *Schneller* at 214. The response does not meet this burden, and the rejection must be maintained for that reason.

8. It is acknowledged that a multiplicity rejection was mailed on July 27, 1989 in parent file 07/096,096. In this rejection, the examiner had limited the applicants to 25 claims.

*Schneller* did not equate a multiplicity rejection with a restriction requirement as a permissible exception to being subject to the non-obvious non--statutory double patenting rejection. For that reason, this action will not overturn the legal reasoning in *Schneller* which supports the non-statutory non-obviousness double patenting rejection above.

It is believed, however, that applicants arguments on this multiplicity issue can be better supported if a nexus is established between the claims of this application and those that were cancelled in 07/096,096 in response to the multiplicity requirement.

Notwithstanding the comment above, at the time the examiner made the multiplicity rejection, there was a body of case law that had overturned similar rejections. Note *In re Flint* 162 USPQ 228 (CCPA 1969) and *In re Wakefield*, 164 USPQ 636 (CCPA 1970).

9. The non-statutory double patenting rejection, whether of the obvious-type or non-obvious-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper

timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornam*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

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\*\*\* NOTICE \*\*\*

ANY AMENDMENT OR REQUEST FOR RECONSIDERATION IN RESPONSE TO THIS FINAL OFFICE ACTION SHOULD BE DIRECTED TO:

Commissioner of Patents and Trademarks

**BOX AF**

Washington, D.C. 20231

By addressing all After Final Office action responses to the above address, processing time of the responses is reduced. This will result in more timely responses by the Office and should result in fewer requests for extensions of time.

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78 (d).

Effective January 1, 1994, a registered attorney or agent of record may sign a Terminal Disclaimer. A Terminal Disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

11. The prior art filed January 4 and 19, 1996 has been considered. It will be made of record in a later action.

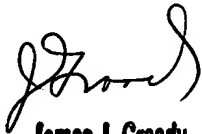
12. Two interviews were held between Mr. Scott and Mr. Groody on April 2, 1996. Mr. Scott pointed out that, in parent file 5,233,654, there had been a restriction requirement. After reviewing the file, Mr Groody indicated that there would not be a Schneller double patenting rejection made in any case based on parent patent 5,233,654 and 5,335,277. The action recently sent out in 08/113,329 would be changed to reflect this point. Mr. Scott inquired whether a terminal disclaimer, in these applications, would have to be filed for all of the four Harvey patents (4,694,490; 4,704,725; 4,965,825; 5,109,414). Mr. Groody

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felt that all four should be disclaimed, if applicants elect to take that approach toward overcoming the double patenting rejections, because of the requirement in terminal disclaimers concerning common ownership. Mr. Scott indicated that in parent patent 4,965,825, there had been a multiplicity rejection. Mr. Groody will order the file, but felt that rejection would not overcome the Schneller double patenting rejections since the CCPA did not list this situation as an acceptable reason to file continuing cases. The Court limited it exception to "independent and distinct" claims. Mr. Groody acknowledged that the Board of Appeals may accept the multiplicity argument, but, in the absence of case law on this issue, he would still apply the Schneller rejections.

13. Any inquiry concerning this communication should be directed to James Groody, whose present telephone number is (703) 308-5461. The Group receptionist number is 305-4700.

  
**James J. Groody**  
**Supervisory Patent Examiner**  
**Art Unit 262**  
*Group 2600*